§ 98.427

- (3) Quarterly concentration of the CO_2 stream in volume or weight percent.
 - (4) Report density as follows:
- (i) Quarterly density of CO_2 in metric tons per standard cubic meter if you report the concentration of the CO_2 stream in paragraph (b)(3) of this section in weight percent.
- (ii) Quarterly density of the CO_2 stream in metric tons per standard cubic meter if you report the concentration of the CO_2 stream in paragraph (b)(3) of this section in volume percent.
- (5) The method used to measure density.
- (6) The standard used to measure CO_2 concentration.
- (7) The location of the flow meter in your process chain in relation to the points of CO_2 stream capture, dehydration, compression, and other processing.
- (c) For the aggregated annual mass of CO_2 emissions calculated using Equation PP-3a or PP-3b, report the following:
- (1) If you use Equation PP–3a of this subpart, report the annual CO_2 mass in metric tons from all flow meters and CO_2 streams that deliver CO_2 to containers.
- (2) If you use Equation PP-3b of this subpart, report:
- (i) The total annual CO_2 mass through main flow meter(s) in metric tons.
- (ii) The total annual CO_2 mass through subsequent flow meter(s) in metric tons.
- (iii) The total annual CO_2 mass supplied in metric tons.
- (iv) The location of each flow meter in relation to the point of segregation.
- (d) If you use Equation PP-4 of this subpart, report at the corporate level the annual mass of CO_2 in metric tons in all CO_2 containers that are imported or exported.
- (e) Each reporter shall report the following information:
- (1) The type of equipment used to measure the total flow of the CO_2 stream or the total mass or volume in CO_2 containers.
- (2) The standard used to operate and calibrate the equipment reported in (e)(1) of this section.

- (3) The number of days in the reporting year for which substitute data procedures were used for the following purpose:
 - (i) To measure quantity.
 - (ii) To measure concentration.
 - (iii) To measure density.
- (f) Report the aggregated annual quantity of CO_2 in metric tons that is transferred to each of the following end use applications. if known:
 - (1) Food and beverage.
- (2) Industrial and municipal water/wastewater treatment.
- (3) Metal fabrication, including welding and cutting.
 - (4) Greenhouse uses for plant growth.
- (5) Fumigants (e.g., grain storage) and herbicides.
 - (6) Pulp and paper.
 - (7) Cleaning and solvent use.
 - (8) Fire fighting.
- (9) Transportation and storage of explosives.
- (10) Enhanced oil and natural gas recovery.
- (11) Long-term storage (sequestration).
 - (12) Research and development.
 - (13) Other.
- (g) Each production process unit that captures a CO_2 stream for purposes of supplying CO_2 for commercial applications or in order to sequester or otherwise inject it underground when custody of the CO_2 is maintained shall report the percentage of that stream, if any, that is biomass-based during the reporting year.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79171, Dec. 17, 2010]

§ 98.427 Records that must be retained.

In addition to the records required by \$98.3(g) of subpart A of this part, you must retain the records specified in paragraphs (a) through (c) of this section, as applicable.

- (a) The owner or operator of a facility containing production process units must retain quarterly records of captured or transferred CO_2 streams and composition.
- (b) The owner or operator of a CO_2 production well facility must maintain quarterly records of the mass flow or volumetric flow of the extracted or

transferred CO₂ stream and concentration and density if volumetric flow meters are used.

(c) Importers or exporters of CO₂ must retain annual records of the mass flow, volumetric flow, and mass of CO₂ imported or exported.

§ 98.428 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

Subpart QQ—Importers and Exporters of Fluorinated Greenhouse Gases Contained in Pre-Charged Equipment or Closed-Cell Foams

Source: 75 FR 74856, Dec. 1, 2010, unless otherwise noted.

§98.430 Definition of the source category.

(a) The source category, importers and exporters of fluorinated GHGs contained in pre-charged equipment or closed-cell foams, consists of any entity that imports or exports pre-charged equipment that contains a fluorinated GHG, and any entity that imports or

exports closed-cell foams that contain a fluorinated GHG.

§98.431 Reporting threshold.

Any importer or exporter of fluorinated GHGs contained in precharged equipment or closed-cell foams who meets the requirements of \$98.2(a)(4) must report each fluorinated GHG contained in the imported or exported pre-charged equipment or closed-cell foams.

§ 98.432 GHGs to report.

You must report the mass of each fluorinated GHG contained in precharged equipment or closed-cell foams that you import or export during the calendar year. For imports and exports of closed-cell foams where you do not know the identity and mass of the fluorinated GHG, you must report the mass of fluorinated GHG in CO₂e.

§98.433 Calculating GHG contained in pre-charged equipment or closed-cell foams.

(a) The total mass of each fluorinated GHG imported and exported inside equipment or foams must be estimated using Equation QQ-1 of this section:

$$I = \sum_{t} S_t * N_t * 0.001 \text{ (Eq. QQ-1)}$$

Where:

- I = Total mass of the fluorinated GHG imported or exported annually (metric tons)
- t = Equipment/foam type containing the fluorinated GHG.
- S_t = Mass of fluorinated GHG per unit of equipment type t or foam type t (charge per piece of equipment or cubic foot of foam, kg).
- N_t = Number of units of equipment type t or foam type t imported or exported annu-

ally (pieces of equipment or cubic feet of

0.001 = Factor converting kg to metric tons.

(b) When the identity and mass of fluorinated GHGs in a closed-cell foam is unknown to the importer or exporter, the total mass in CO_2e for the fluorinated GHGs imported and exported inside closed-cell foams must be estimated using Equation QQ-2 of this section:

$$I = \sum_{t} S_{t} * N_{t} * 0.001 \text{ (Eq. QQ-2)}$$